

IN THE CLAIMS:

Please cancel claims 1-15.

Please add the following new claims:

16. An expression vector comprising two inverted terminal repeats of adeno-associated virus 2 and at least one cassette comprising a promoter capable of effecting cell-specific expression, wherein each of said inverted terminal repeats is SEQ ID NO: 1 or a fragment of SEQ ID NO: 1 that comprises nucleotides 1 to 125 of SEQ ID NO: 1, wherein said promoter is operably linked to a heterologous gene, and wherein said cassette resides between said inverted terminal repeats.
17. The vector of claim 16 wherein each of said inverted terminal repeats is SEQ ID NO:1.
18. The vector of claim 16 wherein each of said inverted terminal repeats is a fragment of SEQ ID NO: 1 that comprises nucleotides 1 to 125 of SEQ ID NO:1.
19. The vector of claim 16 wherein said heterologous gene encodes a biologically functional protein.
20. The vector of claim 16 wherein said heterologous gene encodes a non-biologically functional protein.
21. The vector of claim 16 wherein said heterologous gene encodes an antisense RNA.
22. The vector of claim 16 wherein said heterologous gene is selected from the group consisting of a gene encoding α-globin, β-globin, γ-globin, granulocyte macrophage-colony stimulating factor (GM-CSF), tumor necrosis factor (TNF), any one of interleukins 1-11, neomycin resistance, luciferase, adenine phosphoribosyl transferase (APRT), retinoblastoma, insulin, mast cell growth factor, p53, and adenosine deaminase.

23. The vector of claim 16 wherein said heterologous gene encodes P-glycoprotein.

24. The vector of claim 21 wherein said antisense RNA is complementary to a segment of the DNA or RNA encoding α-globin.

25. The vector of claim 16 wherein said vector is AAV-B19-mdr.

26. A host cell transfected by the vector of any one of claims 16-25.

27. The host cell of claim 26 wherein said cell is a hematopoietic stem or hematopoietic progenitor cell.

28. A virion comprising the vector of any one of claims 16-24.

29. A host cell infected by the virion of claim 28.

30. The host cell of claim 29 wherein said cell is a hematopoietic stem or progenitor cell.

Status of Claims and Support for Changes Made to the Claims:

1-15. (Cancelled)

16-30. (Pending)

Support for added claims 16-30 is identified in the Preliminary Amendment filed on July 16, 2003 and the Amendment filed on August 30, 2004. More specifically, the expression vector of claim 16 is supported by claim 1 of the original patent and by the entire specification, e.g., column 17, lines 1-32. Furthermore, the recitation in claim 16 of "wherein each of said inverted terminal repeats is SEQ ID NO: 1 or a fragment of SEQ ID NO: 1 that comprises nucleotides 1 to 125 of SEQ ID NO: 1", is supported by the specification, e.g., on col. 9, lines 41-45, where the text refers to "the 145 nucleotides of FIG. 1" (i.e., SEQ ID NO: 1) and "[f]ragments which contain the 125 nucleotides which form the palindromic hairpin (nucleotide 1-125 of FIG. 1)" (i.e., nucleotide 1-125 of SEQ ID NO: 1). Claims 17-30, which depend from claim 16, are written in the same manner as dependent claims 2-15 of the '834 patent and are supported throughout the specification.